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New hawk moths from the Philippines (Lepidoptera, Sphingidae)

by

Willem HOGENES and Colin G. TREADAWAY

Abstract: Five new species of Sphingidae from the Philippines are described and figured in black and white. These include *Clanis* ***negritensis*** **sp. n.** from Negros, *Daphnis* ***vriesi*** **sp. n.** from Luzon, Mindanao, Samar and Palawan, *Eupanacra* ***cadioui*** **sp. n.** from Luzon and Leyte, *Eurypteryx* ***alleni*** **sp. n.** from Negros and Palawan as well as Sumatra and Borneo (Sarawak, Brunei) and *Macroglossum* ***arimasi*** **sp. n.** from Negros. Genitalia drawings are provided for *Clanis negritensis* sp. n., *Daphnis vriesi* sp. n., *D. hayesi* CADIOU 1988 (for comparison to *D. vriesi*), *Eurypteryx alleni* sp. n., *E. falcata* GEHLEN 1922 (for comparison to *E. alleni*) and *Macroglossum arimasi* sp. n. Further it is explained why *Lophura hyas* WALKER 1856 is without a valid genus name. Consequently the name ***Neogurelca*** **gen. n.** (type species: *Lophura hyas* WALKER 1856) is proposed.

Neue Schwärmer von den Philippinen (Lepidoptera, Sphingidae)

Zusammenfassung: Fünf neue Sphingiden-Taxa von den Philippinen werden beschrieben und schwarzweiß abgebildet. Dies sind *Clanis* ***negritensis*** **sp. n.** von Negros, *Daphnis* ***vriesi*** **sp. n.** von Luzon, Mindanao, Samar und Palawan, *Eupanacra* ***cadioui*** **sp. n.** von Luzon und Leyte, *Eurypteryx* ***alleni*** **sp. n.** von Negros und Palawan sowie Sumatra und Borneo (Sarawak, Brunei) und *Macroglossum* ***arimasi*** **sp. n.** von Negros. Genitaldarstellungen werden zu den Arten *Clanis negritensis* sp. n., *Daphnis vriesi* sp. n., *D. hayesi* CADIOU 1988 (als Vergleich zu *D. vriesi*), *Eurypteryx alleni* sp. n., *E. falcata* GEHLEN 1922 (als Vergleich zu *E. alleni*) und *Macroglossum arimasi* sp. n. gegeben. Des weiteren wird erläutert, warum *Lophura hyas* WALKER 1856 ohne geltenden Gattungsnamen ist, und folglich der Name ***Neogurelca*** **gen. n.** (Typusart: *Lophura hyas* WALKER 1856) vorgeschlagen.

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Introduction

Members of the family Sphingidae range worldwide, but are more numerous in tropical and subtropical areas. There have been a number of studies made of the family as a whole, the most recent being by D'ABRERA ([1987]). Additionally, the oriental fauna over the past 50 years has been studied for several specific areas: for Borneo by HARMAN (1981) and HOLLOWAY (1987), for Sumatra by DIEHL ([1983]), for Java by DUPONT & ROEPKE (1941) and for Taiwan by INOUE (1973). The authors of this paper are preparing a forthcoming article in which the Sphingidae of the Philippines will be reviewed. Material made available primarily from recent collecting trips over the past ten years has been carefully researched. From this study it became evident that five, as yet undescribed species of Sphingidae occur in the Philippines. Consequently it was deemed pertinent to prepare this preliminary paper to establish these new species prior to the main publication on Philippine Sphingidae. The collections in which holotypes, paratypes or reference material are located have been abbreviated in the write-up as follows:

BMNH – The Natural History Museum (formerly British Museum (Natural History)), London, England
CMP – Carnegie Museum, Pittsburg, USA
NSMT – National Science Museum, Tokyo, Japan
SMF – Senckenberg-Museum, Frankfurt/Main, Germany
ZMA – Zoölogisch Museum, Universiteit van Amsterdam, Netherlands
CGT – Collection of C. G. TREADAWAY, assigned to the Senckenberg-Museum, Frankfurt/Main, Germany
EWD – Collection of E. W. DIEHL, Sumatra, Indonesia
JMC – Collection of J.-M. CADIOU, Brussels, Belgium
TWH – Collection of T. W. HARMAN, Canterbury, England
WJT – Collection of W. J. TENNENT, Whitby, England

Clanis negritensis sp. n.

Material examined.

Holotype: ♂, Philippines, Negros, nr. Mambucal, 17. viii. 1987, leg. A. BUENAFE, CGT.

Paratypes: ♂, Philippines, Negros Occidental, Mt. Canlaon, 30. vii. 1991, leg. P. ARIMAS, ZMA,

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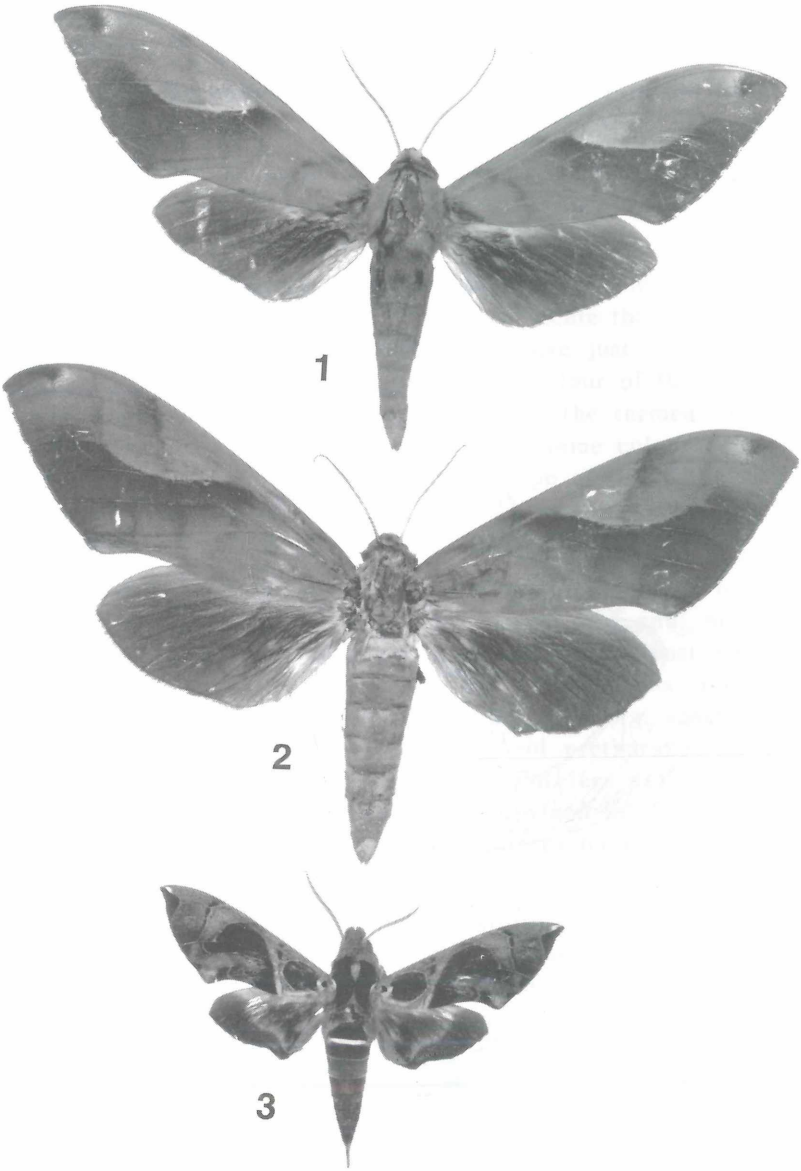

Fig. 1: *Clanis negritensis* sp. n., holotype male.
Fig. 2: *Clanis negritensis* sp. n., paratype female.
Fig. 3: *Daphnis vriesi* sp. n., holotype male.

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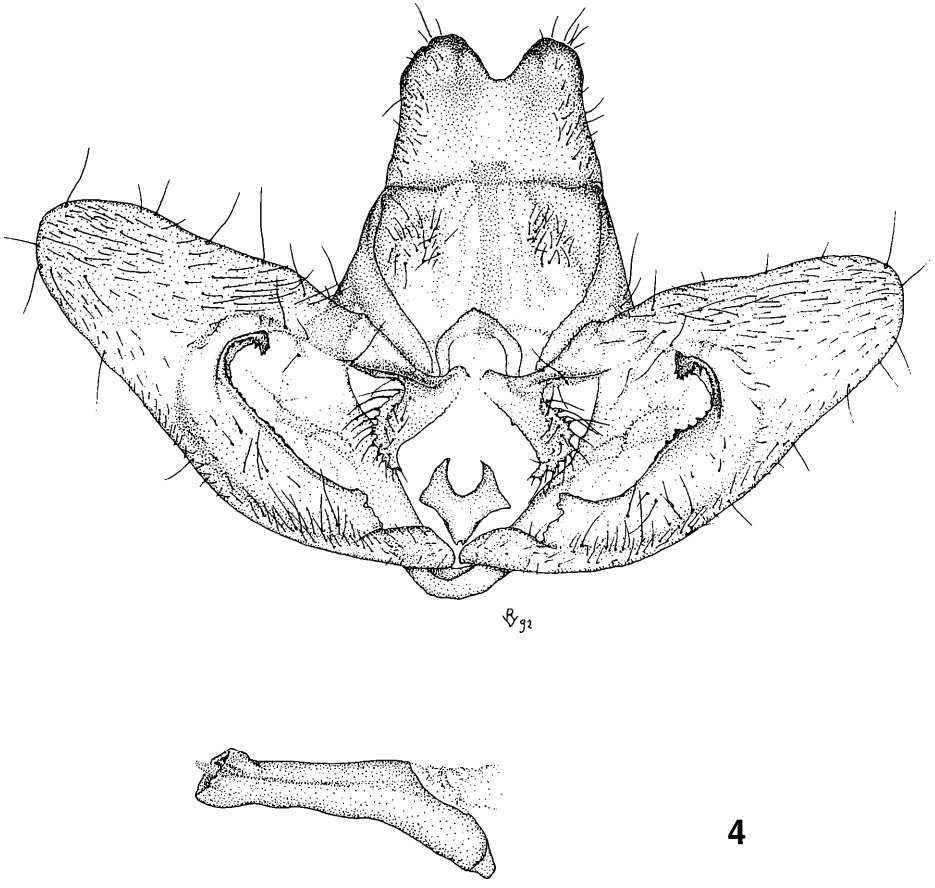

Fig. 4: *Clanis negritensis* sp. n., ♂ genitalia.

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♀, Philippines, Negros Occidental, Mt. Canlaon, 3. viii. 1991, leg. P. ARIMAS, CGT,
♂, Philippines, N. Negros, Mambucal, v. 1990, JMC.

Holotype is in the collection of CGT. Paratypes are in the collections of JMC, ZMA and CGT.

Diagnosis. Similar to both *Clanis titan* ROTHSCHILD & JORDAN 1903 and *C. surigaoensis* CLARK 1928, but differing in the shape and maculation of the wings and in the genitalia.

Description. Male (Fig. 1). Length of forewing (from base to apex): 66–69 mm. Apex of the forewing much less falcate than in *C. surigaoensis;* termen almost straight, slightly concave just below the apex and slightly convex towards tornus. Ground colour of the base of the forewing purplish, changing to brown towards the termen. The large patch between R3 and costa purplish, of the same colour as the base of the wing, with a rosy line along R3. Shape of this patch as in *C. surigaoensis,* with the border along R3 running almost straight to the costa, without any sharp angles as can be found in *C. titan.*

Hindwing as in *C. titan,* but darker brown and the black basal area more extended. Area along the inner margin and anal angle rosy. Underside of both wings is a bright orange-red, almost completely without darker shading towards the termen. Head, thorax and abdomen are of the same colour as the base of the forewing; some brownish patches of hairs above the wings. Head and prothorax with a dark brown dorsal line. Antennae orange-red. Forelegs very dark brown. Mid- and hindlegs lighter brown tending to red in tibia and tarsus. Femur of mid- and hindlegs with a white streak on the outside. Tibial spurs white.

Genitalia (Fig. 4): uncus ending in two stumps, not in sharp hooks as in *C. titan* and *C. surigaoensis;* dorsal process of the valve more slender than in *C. surigaoensis* but as in that species beset with many tubercles; harpe as in *C. surigaoensis,* but with more teeth.

Female (Fig. 2). Length of forewing: 73 mm. Similar to the male but overall darker. Shape of the wings more rounded.

Distribution. Only known from Negros.

Etymology. The species is named after the island of Negros, where all known specimens were collected along with many other interesting species of Sphingidae.

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Daphnis vriesi **sp. n.**

Material examined.
Holotype: ♂, Philippines, N. Luzon, Mt. Polis, 2000 m, 4. v. 1988, leg. J. SETTELE & C. G. TREADAWAY.
Paratypes: ♂, Philippines, N. Luzon, Banaue, 1000 m, 5. iii. 1988, leg. J. SETTELE; ♀, Philippines, N. Luzon, Banaue, 3600 ft, 29. iv. 1988, leg. J. SETTELE & C. G. TREADAWAY; ♂, Philippines, N. Luzon, Mt. Polis, 2000 m, 4. v. 1988, leg. J. SETTELE & C. G. TREADAWAY; ♂, Philippines, N. Luzon, Mt. Polis, 1900 m, 4. v. 1988, leg. J. SETTELE & C. G. TREADAWAY; ♀, Philippines, N. Luzon, Mt. Polis, 1900 m, 4. v. 1988, leg. J. SETTELE & C. G. TREADAWAY; ♀, Philippines, N. Luzon, Mt. Polis, 1900 m, 5. v. 1988, leg. J. SETTELE & C. G. TREADAWAY; ♀, Philippines, N. Luzon, Banaue, 3600 ft, 22. ix. 1988, leg. J. SETTELE & T. ACHILLES; ♀, Philippines, N. Luzon, Ifugao, vicinity Banaue, 20 km north of Lagawe, 1200 m, 22. ix.–16. x. 1988, leg. K. CERNY & A. SCHINTLMEISTER, JMC; ♀, Philippines, N. Luzon, Barlig, 2000 m, 19. xi. 1988, leg. T. ACHILLES, S. GEISSLER & J. SETTELE; ♀, Philippines, N. Luzon, Ifugao, Mt. Polis, 16 km SSE. of Bontoc, 2000 m, 23. xi. 1988, leg. K. CERNY & A. SCHINTLMEISTER, JMC; ♀, Philippines, N. Luzon, Banaue, 4000 ft, 10. v. 1990, leg. T. ACHILLES; ♀, Philippines, Mindanao, Bukidnon, Dalongdong, 1000 m, 31. xii. 1991 to 2. i. 1992, leg. K. CERNY, JMC; ♀, Philippines, C. Samar, Bagacay, 800 ft, 8. viii. 1979, leg. C. G. TREADAWAY & T. BORROMEO; ♂, Philippines, C. Samar, Bagacay, 800 ft, 9. viii. 1979, leg. C. G. TREADAWAY; ♂, Philippines, C. Palawan, Irawan, 500 ft, 18. vi. 1976, leg. C. G. TREADAWAY; ♂, 2 ♀♀, Philippines, N. Palawan, San Vicente, 20 km, NEE. of Roxas, 400 m, 12.–17. i. 1988, leg. K. CERNY & A. SCHINTLMEISTER, JMC; ♂, Philippines, Palawan, Irawan, 18. i. 1988, leg. R. RODRIQUEZ; ♂, Philippines, Palawan, JMC.
Holotype is deposited in the collection of CGT. Paratypes are in the collections of JMC (7), ZMA (6) and CGT (7).

Diagnosis. This species is closely related to both *Daphnis hypothous* (CRAMER 1780) and *Daphnis hayesi* CADIOU 1988. In colouration and maculation it is intermediate between these two species. In size the new species is smaller than the other two. In the male genitalia it differs from both *D. hypothous* and *D. hayesi*, especially in the shape of the harpe.

Description.
Male (Fig. 3). Length of forewing (from base to apex): 35–38 mm. General maculation of the upperside of the fore- and hindwing as in

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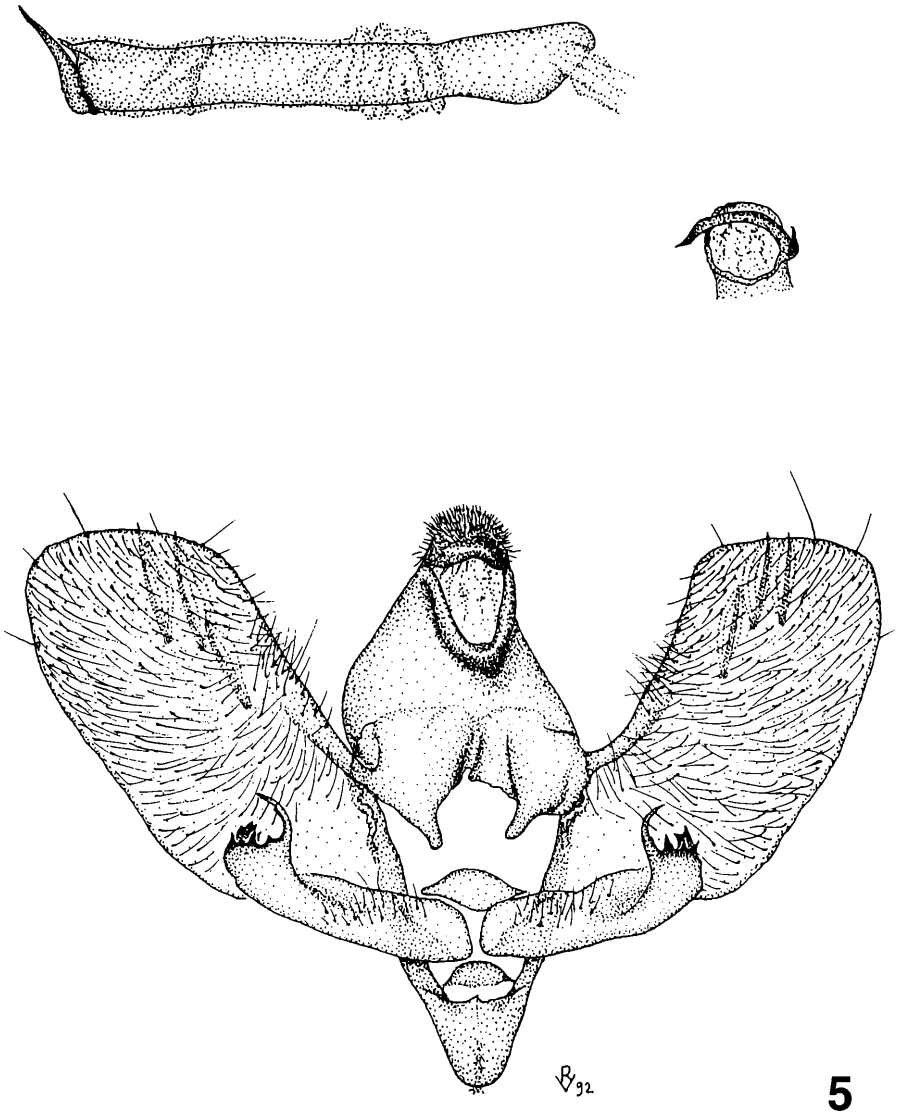

Fig. 5: *Daphnis vriesi* sp. n., ♂ genitalia/aedeagus/tip of aedeagus.

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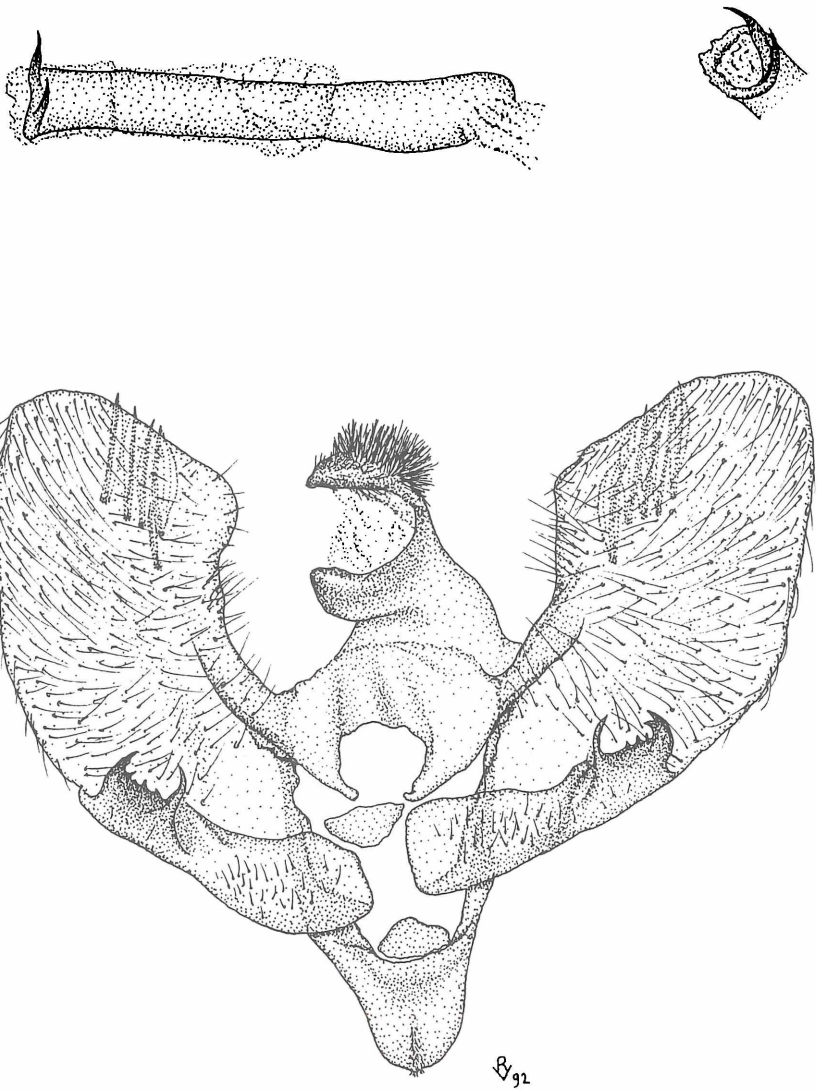

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Fig. 6: *Daphnis hayesi* CADIOU 1988, ♂ genitalia/aedeagus/tip of aedeagus.

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D. hayesi. The triangular terminal spot just below the apex of the forewing however much larger than for the aforementioned species and the antemedian band between the dark basal blotch and the dark discal area not as oblique as in *D. hayesi* but running almost straight from costa to dorsum and tapering in that direction from a width of more than 1 mm to a very thin line. In colouration the species is much less variegated than *D. hayesi*, more like *D. hypothous*. Ground colour brown. In the dark parts of the maculation the species is dark brown, lacking all of the beautiful green scaling of *D. hayesi*. Also most of the white parts of the forewing pattern are lacking or vestigial. The white spot in the apex being very small and in most specimens this is the only white that can be found on the wings. Hindwing above as in *D. hayesi*. Underside of both wings dark brownish red, lacking the white maculation of *D. hayesi* and *D. hypothous*, except for a small white spot in the apex of the forewing and another one in the cell of the hindwing. Antennae creamy yellow. Head greyish brown. Palpi grey tending to brown with a distinct white line on the first segment just beneath the eye. Upperside of the thorax and abdomen greyish brown. Tegulae dark brown with a short white line along the distal borders. First tergite with a dark brown dorsal spot, fading to light brown laterally and bordered distally by a narrow white line. Second, seventh and eighth tergites with brown dorsal spots.
Legs as in *D. hayesi*, grey speckled with brown, not as light as in *D. hypothous*. In some aspects of the genitalia (Fig. 5) the new species is quite distinct. In *D. hypothous* and *D. hayesi* (Fig. 6) the harpe ends in a ridge on which the toothlike processes are next to each other in one straight row. In *D. vriesi* this ridge is curved, causing the toothlike processes to be arranged in half a circle. Valves with only three large friction scales. In the aedeagus the shorter of the two processes is even shorter than in *D. hypothous*.

Female. Length of forewing: 38–42 mm. Similar to the male but overall darker and with more traces of green scaling in the dark parts of the maculation of the forewings. Seventh tergite darker brown than the preceding one, laterally and distally bordered by a lighter line.

Distribution. The species is known from Luzon, Mindanao, Palawan and Samar. Based on this scattered distribution it would be logical for this species to occur on other Philippine islands.

Etymology. The species is named after Mr. J. G. DE VRIES of Rotterdam, who was the first to recognize it.

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Eupanacra ***cadioui*** **sp. n.**

Material examined.

Holotype: ♂, Philippines, N. Luzon, Banaue, 3600 ft, 13. vi. 1988, leg. J. SETTELE.

Paratype: ♀, Philippines, Leyte, Hilusig, Mt. Balocaue, 600 m, 21. ii. 1987, leg. T. BORROMEO.

Holotype and paratype are in the collection of CGT.

Diagnosis. This beautiful species combines some of the most attractive features that can be found within the genus. In the shape of the wings it resembles *Eupanacra busiris* (WALKER 1856) and in the forewing it has a complete dark band running from near the base of the wing to near the apex, similar to the dark streak in the forewing of *E. sinuata* (ROTHSCHILD & JORDAN 1903). Most other aspects of the species are unique in the genus, which makes it impossible to confuse it with other species.

Description.

Male (Fig. 7). Length of forewing (from base to apex): 28 mm. Termen of forewing concave between the apex and R1, concave again from R1 to R2 and then straight from R2 to the tornus. White line just below apex of forewing prominent but not as sharply hooked as in the other species of the genus. Ground colour pale brown as in *E. dohertyi* (ROTHSCHILD 1894). A prominent white subterminal line from R3 to tornus, proximally bordered by a brown streak. Above this are eight alternative light and dark lines, all ending subterminally between SC and R2. A darker band from the dorsum near the base of the wing to close to the apex as in *E. sinuata*. Above this band another band in the ground colour reaching from base of the wing to the apex. In the middle of this band a small black dot at the end of cell. Several small and a few larger black spots along the costa. Hindwing with a reddish hue. Three faint brown lines in the disc of the wing. A terminal brown band speckled with pale brown. Before this a subterminal dark line from near the apex to near the tornus. Fringes of termen white near the apex and tornus. Underside of wings lighter; most of the dark lines of the upperside also visible on the underside. Base of the forewing darker brown. Antennae pale brown. Head, thorax and abdomen with alternating lines of creamy, pale brown and dark brown colours. Underside of the body cream coloured with two dark lines on the abdomen. Legs of the same colour as the underside of the body, with dark lines on the outside of the femur and tibia of the forelegs and the femur of the midlegs. Genitalia not examined; in general appearance the species is sufficiently distinct from all hitherto known species of *Eupanacra*.

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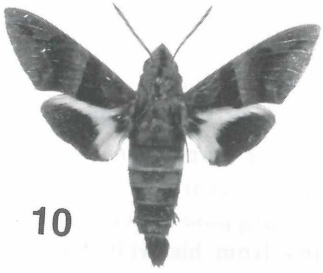

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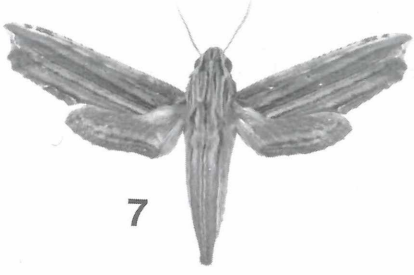

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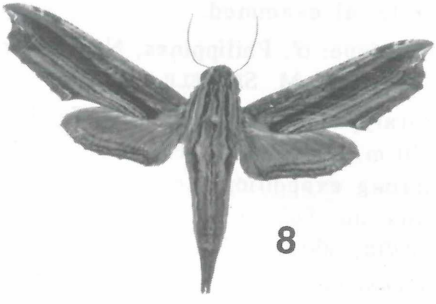

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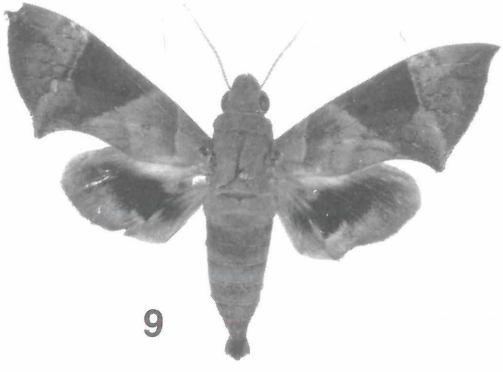

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Fig. 7: *Eupanacra cadioui* sp. n., holotype male.
Fig. 8: *Eupanacra cadioui* sp. n., paratype female.
Fig. 9: *Eurypteryx alleni* sp. n., holotype male.
Fig. 10: *Macroglossum arimasi* sp. n., holotype male.

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Female (Fig. 8). Length of forewing: 32 mm. Similar to the male but slightly larger and much darker in all aspects of the colouration.

Distribution. The species is known from Luzon and Leyte and can be expected to be discovered on other islands of the Philippines.

Etymology. The species is named in honour of Mr. J.-M. CADIOU, enthusiastic collector and researcher of Sphingidae who readily helped us with information on Philippine specimens in his collection. Additionally, we also benefitted from his wide knowledge of Sphingidae from Indo-Australia.

Eurypteryx ***alleni*** **sp. n.**

Material examined.

Holotype: ♂, Philippines, Negros Oriental, Mt. Talinis, 1000 m, 15. x. 1988, J. & M. SETTELE, CGT.

Paratypes: ♂, Brunei, Ulu Temburong expedition 1978, base camp, 300 m, 11. x. 1978, leg. T. W. HARMAN, BMNH; ♂, Brunei, Ulu Temburong expedition b.c., 300 m, x. 1978, leg. S. SUTTON, BMNH gen. slide no. Sphing 335, BMNH; ♂, Brunei, Ulu Temburong, base camp LP298, 300 m, 29. iv. 1989, leg. M. G. ALLEN, TWH; ♂, Brunei, Bukit Bahak, 125 m, 21. xii. 1990, leg. W. J. TENNENT, WJT; ♂, Brunei, Ulu Temburong, LP298, 300 m, 27. iv. 1989, leg. M. G. ALLEN, JMC; ♂, Brunei, Ulu Temburong, LP298, 300 m, 28. iv. 1989, leg. M. G. ALLEN, JMC.

Holotype is deposited in the collection of CGT. Paratypes are in the collections of BMNH (2), JMC (2), TWH (1) and WJT (1).

Additional material but not included in the paratype series:
♂, Indonesia, Sumatra, Nagardja, 300 m, 2. v. 1976, leg. E. W. DIEHL, EWD; ♂, Sarawak, Gunung Api, 900 m, leg. J. D. HOLLOWAY; ♂, Sarawak, Gunung Mulu National Park, R.G.S. expedition 1977/78 site 8, camp 1, Mulu, 150 m, ii. 1978, leg. J. D. HOLLOWAY et al., BMNH; ♂, Indonesia, Ceram, Operation Raleigh, Gunung Kobipoto north slopes, 570 m, lowland forest, viii./ix. 1987, leg. J. D. HOLLOWAY, D. T. JONES et al., temporarily BMNH; ♂, Philippines, N. Palawan, Matalangao, 150 m, 28.–30. viii. 1985, leg. M. OWADA, NSMT (J.-M. CADIOU pers. comm.).

Diagnosis. This species was already described and figured by DIEHL ([1983]: 49, pl. VI) and HOLLOWAY (1987: 159, pl. 16). Both authors considered it to be *E. falcata* GEHLEN 1922. But, though the genitalia

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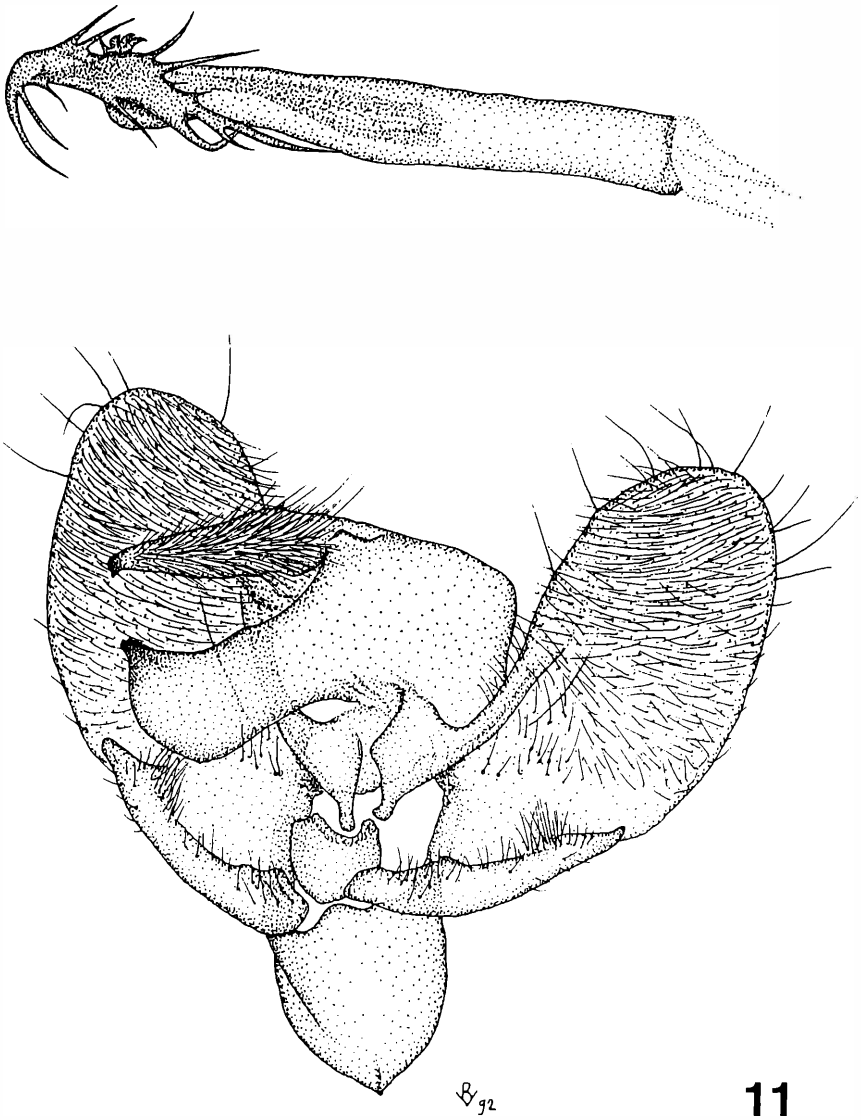

Fig. 11: *Eurypteryx alleni* sp. n., ♂ genitalia.

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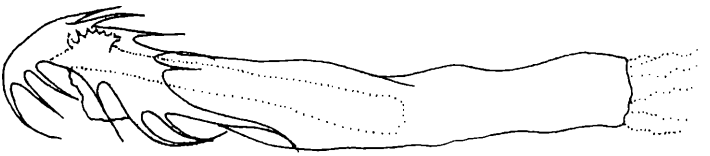

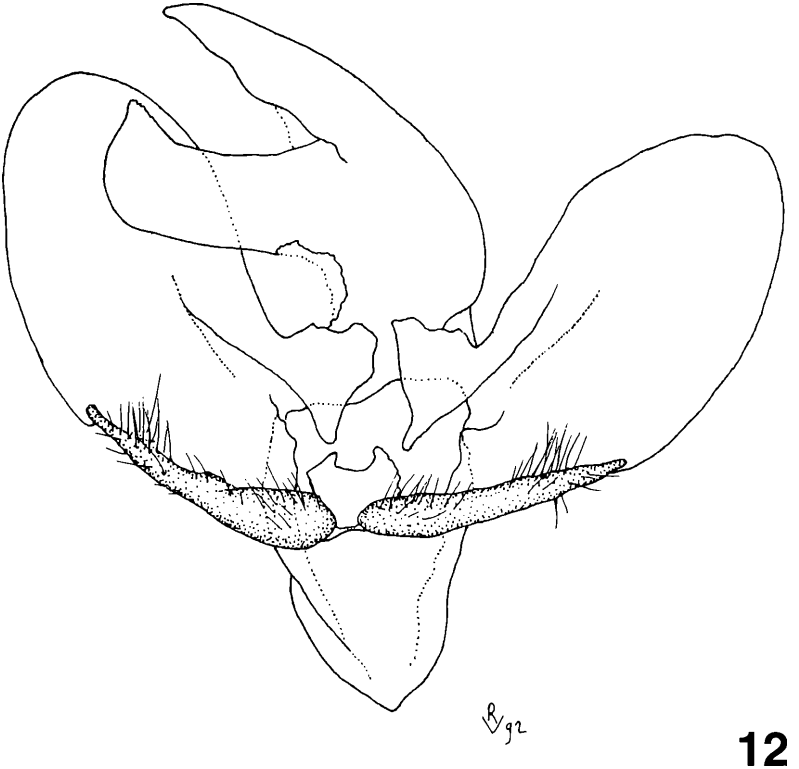

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Fig. 12: *Eurypteryx falcata* GEHLEN 1922, ♂ genitalia.

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of the two forms are very similar, there are many differences between *E. falcata* and this form such that we consider *E. alleni* a distinct species.

Description.

Male (Fig. 9). Length of forewing (from base to apex): 38–40 mm. The moth is very similar to *E. falcata* but differs in the following aspects. On the whole it is much darker than E. falcata. On the body it lacks the dark dorsal spots on tergites four, five and six. Dark spot at base of forewing larger. Antemedian light line straight, not slightly oblique as in *E. falcata*. This line distally followed by a dark, bandlike shading. Proximal border of the dark triangle in the disc of the forewing straight, not proximally indented at the base of the cell. The dark triangle unicolorous; without lighter spots along costa and without a darker area around the stigma. Stigma black, not white. Distal border of the dark triangle in a straight line with the tornus, not with a point on the dorsum about 8 mm proximal from the tornus as in *E. falcata*. Purplish area above the tornus much smaller than in *E. falcata* and not crossed by a brown band. No angulate subterminal line. Hindwing with a large black blotch in the disc of the wing, not with a dark brown band as in *E. falcata*. Underside of the forewing with a large dark triangular patch, extending from the base of the wing to the costa; in *E. falcata* there is just a round blotch restricted to the disc of the wing. Hindwing underside with only two lines instead of three.

Genitalia (Fig. 11) very similar to *E. falcata* (Fig. 12) but while in that species the harpe ends in a short conical process, in *E. alleni* the end of the harpe broadens to a hoe-shaped blade. (Description based on slide no. Sphing 335 which is *E. alleni* from Brunei and slide no. Sphing 336 which is *E. falcata* from the Rawlinson Mountains, N. G., both in the BMNH.)

Distribution. This species is known from Sumatra, Borneo (Sarawak, Brunei) and the Philippines (Negros and Palawan). There is in the BMNH a specimen from Ceram collected during Operation Raleigh in 1987 that agrees very well with *E. alleni* except in having a very diffuse white spot in the forewing (M. R. HONEY, pers. comm.). The presence of this species in the Moluccas indicates that it might be discovered in still more Indonesian islands, especially Halmahera and Sulawesi. Thus, although not overlapping in distribution and certainly closely related, the fact that neither *E. alleni* nor *E. falcata* are very variable geographically strengthens our belief that they are distinct species and not subspecies.

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Etymology. This species is named in honour of M. G. ALLEN who is responsible for the collection of most of the Brunei specimens.

Macroglossum ***arimasi*** **sp. n.**

Material examined.

Holotype: ♂, Philippines, Negros, Mt. Canlaon, 7. v. 1991, leg. P. ARIMAS.

Holotype is deposited in the collection of CGT.

Diagnosis. This species belongs to the group of species around *M. heliophilum* BOISDUVAL [1875], but is distinguished by lacking the black spots on the fourth tergite and in the genitalia.

Description.

Male (Fig. 10). Length of forewing (from base to apex): 23 mm. Maculation of the wings as in *M. heliophilum* but the antemedian band of the forewing is very dark, almost black. Base and terminal band of the hindwing very dark, strongly contrasting with the bright yellow median band. Underside of the wings chestnut brown. Base of the forewing yellow. Yellow anal area on the underside of the hindwing sharply confined at SM2. Body as in *M. heliophilum* but lacking the two black spots on fourth tergite. Instead of three only two yellow lateral sidespots: a very small one on the second tergite and a larger one on the third. Fifth tergite with two lateral black spots. Sixth tergite almost completely black. Fantail black. All abdominal sidetufts tipped with white. Palpi and underside of breast white speckled with brown. Sides of breast dark brown. Underside of the abdomen dark reddish brown with mesial white patches on the first four sternites. Legs brown except for the tarsi of the forelegs which are white. Antennae dark brown.

Genitalia (Fig. 13) differing from all other species in the genus in the harpe which is short, and ending in a clublike knob with a few hairs on it. Dentate process of the aedeagus broad, obtuse and hooked, as in many other species of *Macroglossum*.

Distribution. This species is known only from Negros.

Etymology. The species is named after the collector of the only specimen known, Mr. P. ARIMAS.

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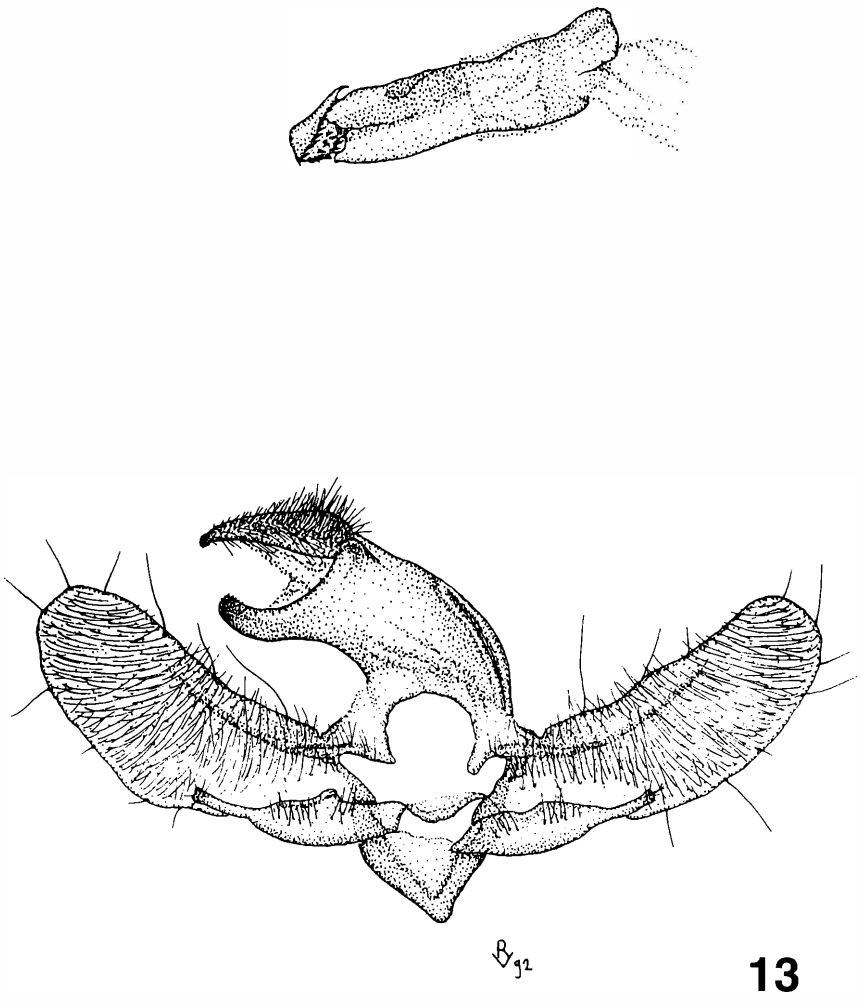

Fig. 13: *Macroglossum arimasi* sp. n., ♂ genitalia.

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Lophura hyas WALKER 1856

We totally agree with FLETCHER & NYE (1982: 18) that *Gurelca* KIRBY 1880 is an objective replacement name for *Lophura* HERRICH-SCHÄFFER [1854], which makes it an objective junior synonym of *Aspledon* BOISDUVAL [1875]. As the type-species of *Aspledon* is *Lophura zantus* HERRICH-SCHÄFFER [1854], which is currently considered congeneric with *Temnora natalis* WALKER 1856, the type-species of *Temnora* WALKER 1856, *Aspledon* must be considered a subjective junior synonym of *Temnora*. This leaves *Lophura hyas* WALKER 1856 (which occurs also in the Philippines) and related species without a valid genus name.

We therefore propose the name:

***Neogurelca* gen. n.**

Type-species: *Lophura hyas* WALKER 1856
List Specimens lepid. Insects Colln Br. Mus. **8**: 107.

There is no doubt whatsoever as to the identity of the genus as it was well defined by ROTHSCHILD & JORDAN (1903: 587–588). It suffices therefore to cite their diagnosis here:

> "Male female. Genal process triangular, obtuse, not reaching tip of pilifer. Palpus projecting, terminal surface triangular, almost quadrangular; scales laterally at apex of first segment prolonged, forming a kind of fan; basal patch of sensory hairs of inner surface absent. Eye strongly lashed; head crested, the crest divided into two carinae which converge behind. Antennae short, filiform in both sexes, strongly compressed in male, cylindrical in female; end-segment short, conical. Spines of abdomen numerous, in several rows, all elongate and weak; male with expansible obtusely triangular anal tuft, female with smaller truncate tuft. Merum of midcoxa not carinate; all the tibiae with some spines; paronychium with the ventral lobes obliterated; no comb on tarsi, hindtarsus with few spines at base; spurs of midtibia almost the same in length, long terminal one of hindtibia about as long as third tarsal segment, or shorter, about a third or a fourth longer than the second terminal spur. Distal margin of forewing denticulate, deeper sinuate behind M1; R3 and M1 close together, M2 from near middle of cell; costal margin of hindwing broadly excised, C incurved at the sinus, approaching SC2; this on a short stalk with

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R1; R2 from before centre of cell, lower angle of cell acute; D3 longer than D4.

Male. Tenth tergite compressed, slender, simple, pointed; sternite broad, triangular or truncate. Clasper without friction-scales. Penis-sheath ending in a dentate process.

Female. Vaginal plate triangular distally, the distal edges somewhat incrassate and more or less elevate; orifice free."

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